

C-172N (N738NH)
AIRPLANE QUESTIONNAIRE

Score: _____ Type/Model Aircraft: **C-172N (N738NH)**

Complete this open book questionnaire using the *Flight Manual/Pilot's Operating Handbook*. If a question or part of a question is not applicable, write in NA. The check pilot will review and grade the questionnaire. Minimum passing score is 80%. The completed questionnaire will be filed in the pilot's flight records.

1. Approved fuel grades and colors are: **100 LL (Blue) / 100 (Green)**
2. Location/capacity of each fuel tank is: **Wings / 21.5 gal ea. (43 gal total)**
3. Total usable fuel under all flight conditions is gallons: **40 gal.**
4. Endurance at 75% power, 7,500-foot MSL, with a 45-minute reserve is hours: **3.8 hrs.**
5. What make and grade oil is used? Winter: **15-50W (NCWG Standard)** Summer: **15-50W (NCWG Standard)**
6. Oil capacity is **8** quarts. Minimum oil quantity for take off is **5** quarts.
7. Minimum oil pressure is **20** psi. Maximum oil pressure is **115** .
8. Maximum oil temperature is **245** degrees (F or C) **F** .
9. Magnetos are checked at **1700** RPM. RPM drop should not exceed **125** RPM on either magneto or **50** RPM differential between magnetos.
10. Maximum RPM and MP for takeoff are **2700** and **N/A** in/Hg.
11. Maximum gross takeoff weight is **2550** pounds. Empty weight is _____ pounds.
Useful load is _____ pounds. Maximum landing weight is **2550** pounds.
12. Baggage compartment locations/weights are: **(1) 95" - 120 lbs (2) 123" - 50 lbs (120 max total)**
13. Give the IAS at **maximum gross** weight for:
 - a. Va (maneuvering speed). **105 KAIS** f. Vmc (minimum control speed – multiengine only). **N/A** .
 - b. Vso (stall, landing config, power. off). **40 KAIS** g. Best glide speed. **68 KIAS** .
 - c. Vs1 (stall, cruise config, power. off). **50 KAIS** .
 - d. Vy (best rate of climb, sea level). **73 KAIS** .
 - e. Vx (best angle of climb, sea level). **62 KAIS** .
14. Give the immediate action/memory items for:
 - a. Engine failure immediately after takeoff.
AIRSPEED - 70 KIAS (flaps UP)
- 65 KIAS (flaps DOWN) .

b. Fire during cranking and engine fails to start.

CRANKING -CONTINUE
THROTTLE – FULL OPEN
MIXTURE – IDLE CUT-OFF
CRANKING – CONTINUE_____.

c. Engine fire in flight.

MIXTURE – IDLE CUT-OFF
FUEL SELECTOR VALVE - OFF_____.

d. Electrical fire in flight.

MASTER SWITCH – OFF
AVIONICS POWER SWITCH - OFF_____.

15. Normal takeoff flap setting is **0 deg** , short field takeoff setting is **10 deg** , and soft field takeoff flap setting is **10 deg** .

16. Maximum demonstrated takeoff/landing crosswind component is **15** knots.

17. Given: PA = 4,000 feet; Temp = 86o F; Runway 27; Wind 320o at 14 knots; runway is paved, level, and dry; aircraft is at maximum takeoff weight.

Find: Total takeoff distance to clear a 50-foot obstacle: **2511 ft** .

18. Given: PA = 6,000 feet; Temp = 68o F; wind calm; runway is paved, level, and dry; aircraft is at maximum landing weight.

Find: Total landing distance to clear a 50-foot obstacle: **1510 ft** .

19. Landing runway 22; wind 190o at 22 gusting to 30 knots. Will the maximum demonstrated crosswind component for this aircraft be exceeded? **NO** .